

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (original) A method for controlling valve patterns in at least a cylinder operating in a multi-stroke mode of an internal combustion engine, the method comprising:
operating a first valve pattern in said cylinder operating in multi-stroke mode during at least a first engine operating condition; and
operating a second valve pattern in said cylinder operating in multi-stroke mode during a second engine operating condition, said second operating condition different from said first operating condition.
2. (original) The method of Claim 1 wherein said operating condition is an engine temperature.
3. (original) The method of Claim 1 wherein said operating condition is engine speed.
4. (original) The method of Claim 1 wherein said operating condition is engine load.

5. (currently amended) A method for determining a pattern of ~~electromechanically~~ **electrically** actuated valves to operate in an internal combustion engine operating in a multi-stroke cylinder mode, the method comprising:

determining an operating condition of said engine;
operating at least one cylinder of said engine in a multi-stroke mode; and

determining a pattern of ~~electromechanically~~ **electrically** actuated valves to operate, based on said operating condition, in said at least one cylinder operating in a multi-stroke mode.

6. (original) The method of Claim 5 wherein said operating condition is an engine temperature.

7. (original) The method of Claim 5 wherein said operating condition is engine speed.

8. (original) The method of Claim 5 wherein said operating condition is engine load.

9. (original) The method of Claim 5 wherein said operating condition is a temperature of a valve.

10. (currently amended) A method for determining a pattern of ~~electromechanically~~ electrically actuated valves to operate in an internal combustion engine operating in a multi-stroke cylinder mode, the method comprising:

determining an operating condition of an ~~electromechanically~~ electrically actuated valve;

operating at least one cylinder of said engine in a multi-stroke mode; and

determining a pattern of ~~electromechanically~~ electrically actuated valves to operate, based on said operating condition, in said at least one cylinder operating in said multi-stroke mode.

11. (currently amended) The method of Claim 10 wherein said operating condition is a temperature of a valve actuator coupled to at least one of said ~~electromechanically~~ electrically actuated valves.

12. (original) The method of Claim 11 wherein said valve actuator is comprised of at least an armature, a coil, and a core.

13. (currently amended) The method of Claim 10 wherein said operating condition of said ~~electromechanically~~ electrically actuated valve is an impedance of a valve actuator coupled to at least one of said ~~electromechanically~~ electrically actuated valves.

14. (currently amended) The method of Claim 10 wherein said operating condition of said ~~electromechanically~~ electrically actuated valve is a temperature of at least one of said ~~electromechanically~~ electrically actuated valves.

15. (original) A method for controlling valve patterns in at least a cylinder operating in a multi-stroke mode of an internal combustion engine, the method comprising:

operating a first valve pattern in said cylinder operating in multi-stroke mode during at least a first valve operating condition; and

operating a second valve pattern in said cylinder operating in multi-stroke mode during a second valve operating condition, said second operating condition different from said first operating condition.

16. (currently amended) The method of Claim 15 wherein said valve operating condition is an operating condition of an ~~electromechanical~~ **electrically actuated** valve.

17. (original) A method for determining a valve pattern to operate in an internal combustion engine operating in a multi-stroke cylinder mode, the method comprising:

determining an operating condition of said engine;

operating at least two groups of cylinders, a first group operating in a first cylinder stroke mode, and a second group operating in a second cylinder stroke mode; and

determining a valve pattern to operate, based on said operating condition, in said first cylinder group and in said second cylinder group.

18. (original) The method of Claim 17 wherein said operating condition is an engine temperature.

19. (original) The method of Claim 17 wherein said operating condition is engine speed.

20. (original) The method of Claim 17 wherein said operating condition is engine load.

21. (currently amended) A method for determining a valve pattern to operate in an internal combustion engine operating in a multi-stroke cylinder mode, the method comprising:

determining an operating condition of an ~~electromechanical~~ **electrically actuated** valve;

operating at least two groups of cylinders, a first group operating in a first cylinder stroke mode, and a second group operating in a second cylinder stroke mode; and

determining a valve pattern to operate, based on said operating condition, in said first cylinder group and in said second cylinder group.

22. (currently amended) The method of Claim 21 wherein said operating condition is a temperature of a valve actuator coupled to at least one of said ~~electromechanically~~ **electrically** actuated valves.

23. (original) A method for determining a number of valves to operate in an internal combustion engine operating in a multi-stroke cylinder mode, the method comprising:

determining an operating condition of an engine;

operating at least two groups of cylinders, a first group operating in a first cylinder stroke mode, and a second group operating in a second cylinder stroke mode; and

determining a valve pattern to operate, based on said operating condition, in said first cylinder group and determining a valve pattern to operate, based on said operating condition, in said second cylinder group that is different than the pattern of operating valves in said first group of cylinders.

24. (currently amended) A computer readable storage medium having stored data representing instructions executable by a computer to control an internal combustion engine of a vehicle, said storage medium comprising:

instructions for determining an operating condition of said engine;

instructions for operating at least one cylinder of said engine in a multi-stroke mode; and

instructions for determining a pattern of ~~electromechanically~~ electrically actuated valves to operate, based on said operating condition, in said at least one cylinder operating in a multi-stroke mode.

25. (original) A method for controlling valve patterns in at least a cylinder operating in a multi-stroke mode of an internal combustion engine, the method comprising:

operating a first valve pattern in said cylinder operating in a multi-stroke mode based at least on an engine operating condition; and

operating a second valve pattern in said cylinder operating in a multi-stroke mode based on a change in said engine operating condition.